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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,286	10/23/2003	David B. Kita	10006.001610	7134

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EXAMINER	
WANG, CLAIRE X	

ART UNIT	PAPER NUMBER
2624	

MAIL DATE	DELIVERY MODE
09/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/692,286	Applicant(s) KITA ET AL.	
	Examiner Claire Wang	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagumo et al. (US 6,400,768 hereinafter "Nagumo").

As to claim 1, Nagumo teaches a method of encoding and encoding a video sequence in which a keyframe (I_{b3} frame; Fig. 49) is used to bi-directionally predict frames in the sequence (Fig. 49), the method comprising, coding said keyframe independently of other frames in the sequence (I-frame of Fig. 49); and predicting a prior unidirectional predicted frame occurring before said keyframe using data from said keyframe and not from any other keyframe, directly or indirectly (prediction of B_{b2} and B_{b1} is from I_{b3} and not from any other I-frames; Fig. 49); and predicting a subsequent frame occurring after the unidirectional predicted keyframe using the data from said keyframe and not from any other keyframe, directly or indirectly (prediction of B_{b4} and B_{b4} is from I_{b3} and not from any other I-frames; Fig. 49).

Art Unit: 2624

As to claim 2, Nagumo teaches wherein the keyframe is selected from a middle of a group of pictures to be encoded (I-frame is one frame within a series of frames; Fig. 49).

As to claim 3, Nagumo teaches wherein the method further comprises predicting in series all prior frames within the group of pictures that occur before the keyframe using data from the keyframe and not from any other keyframe (Fig. 49).

As to claim 4, Nagumo teaches wherein the method further comprises predicting in series all subsequent frames within the group of pictures that occur after the keyframe using data from the keyframe and not from any other keyframe (Fig. 49).

As to claim 5, Nagumo teaches wherein at least one prior intervening frame occurs between the key frame and the prior frame, and wherein the method further comprises bi-directionally predicting the prior intervening frame using the data from the keyframe and data from the prior frame, without using data derived from any other keyframe (Fig. 49).

As to claim 6, Nagumo teaches wherein at least one subsequent intervening frame occurs between the keyframe and the subsequent frame, and wherein the method further comprises bi-directionally predicting the subsequent intervening frame using the data from the keyframe and data from the subsequent frame, without using data derived from any other keyframe (Fig. 49).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Haskell et al. (US 2004/0017851) teaches a method and apparatus for variable accuracy inter-picture timing specification for digital video encoding with reduced requirements for division operations.

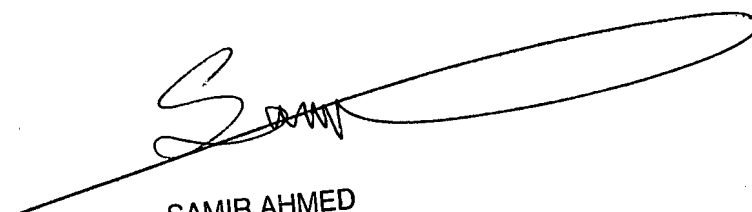
Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Claire Wang whose telephone number is 571-270-1051. The examiner can normally be reached on Mid-day flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on 571-272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Claire Wang
09/22/2007



SAMIR AHMED
PRIMARY EXAMINER